



Global Warming in the Garden State

Concern over global warming has risen to new heights as climate scientists document significant change to the global climate - from the rapidly melting ice caps to more frequent days with temperatures above 90° F in the Northeast. State and local governments as well as citizens, corporations and concerned organizations have begun to assess the potential consequences of global warming and strategies to reduce the greenhouse gas emissions.

“Overwhelming evidence has proved that global warming poses a serious threat and if we as a people continue on a course of inaction the planet will continue to warm, water levels will continue to rise and Atlantic City and our coastal communities will drown,” said Governor Jon S. Corzine following a briefing in July by the Union of Concerned Scientists.

In the Garden State, scientists have already seen a 1.5° F increase in the average temperature since 1970 and expect this trend to continue. The frequency of severe storms with heavy rainfall is expected to increase, as is the likelihood of droughts. Sea level rise will also affect our coastline.

“Our response to global warming in the next few years will shape the climate our children and grandchildren inherit,” said Peter Frumhoff, director of science and policy of the Union of Concerned Scientists and chair of the Northeast Climates Impact Assessment upon the July release of the Northeast Climate Impacts Assessment report, “Confronting Climate Change in the U.S. Northeast.”



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New Jersey's Response

With the Global Warming Response Act signed, New Jersey has become a national leader in the effort to reduce greenhouse gas emissions. The law builds on the Governor's Executive Order (EO) #54 issued earlier in 2007 and a host of other initiatives to reduce global warming. Other activities include:



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Regional Greenhouse Gas Initiative (RGGI)

The DEP and Board of Public Utilities have leadership roles in the Regional Greenhouse Gas Initiative, a ten state cooperative effort to implement a regional mandatory cap and trade program in the Northeast and Mid Atlantic addressing CO₂ emissions from power plants. RGGI is the first mandatory market-based program to reduce carbon emissions in the U.S. It will cap regional power plant CO₂ emissions at current levels from 2009 through 2014 and mandates reduced emissions by 10% in 2019.

NJ Clean Car Program

In January 2006, New Jersey adopted rules to implement the California Low Emission Vehicle (LEV) program in 2009. The New Jersey program contains three components: vehicle emission standards, fleet wide emission requirements, and a Zero Emission Vehicle (ZEV) sales requirement. The rules require automakers to reduce fleet-wide greenhouse gas emissions from the vehicles they sell in New Jersey 30% by 2016. A current Clean Vehicles List is available on the DEP web site at www.nj.gov/dep/cleanvehicles/

NJ Renewable Portfolio Standard

The NJ Board of Public Utilities has adopted a Renewable Portfolio Standard (RPS) requiring that utilities meet 6.5% of customers' electricity needs from renewable energy sources by May 31, 2009. The RPS increases 20% by 2020, which is one of the most aggressive requirements in the U.S. Use of renewable energy reduces combustion of fossil fuels and the generation of greenhouse gases.

NJ Clean Energy Program - Energy Efficiency and Renewable Energy

The BPU implements the New Jersey Clean Energy Program, a ratepayer-funded program which provides financial and other incentives to encourage more efficient energy usage, and in state electricity generation using



New Jersey has become a national leader in the effort to reduce greenhouse gas emissions through the signing of the Global Warming Response Act. In addition, a host of other statewide initiatives have been implemented to address global warming including efforts to reduce CO₂ emissions from power plants; adopting rules to reduce greenhouse gas emissions from vehicles; and encouraging the use of renewable energy sources.



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renewable energy sources. The program encourages installation of energy-efficient and renewable electricity generation technologies. Governor Corzine has established a goal of meeting 20% of New Jersey's energy needs through energy efficiency and conservation gains by 2020.

Currently, New Jersey state government spends approximately \$128 million on energy costs. Through energy audits, increased use of Energy Star compliant products and implementation of energy efficiency practices at state facilities the government will save millions of dollars. More information on these programs is available online at www.njcleanenergy.com

NJ Consolidated Energy Savings Program

The New Jersey Consolidated Energy Savings Program, administered by the New Jersey Department of Treasury, currently procures 13% of total electric demand for State facilities in the form of renewable energy. This ranks New Jersey 14th nationally in the total amount of renewable electricity procured for State facilities.

NJ Cool Cities Initiative

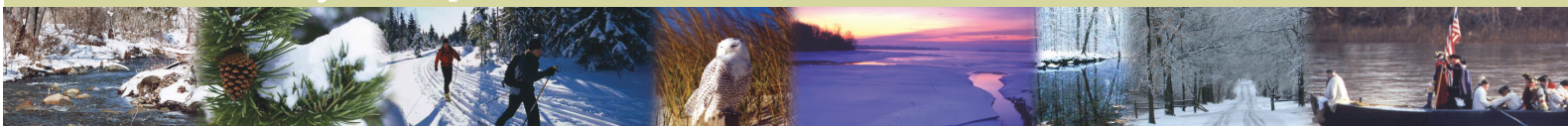
In order to reduce the urban heat island effects, the DEP and BPU launched the Cool Cities Initiative in the Fall of 2003 to green New Jersey's larger cities by planting trees. In addition to creating cooler, more comfortable urban environments, trees also help to reduce air pollution, reduce the demand for electricity and improve urban quality of life overall. To date, more than 17,000 trees have been planted in Asbury Park, Elizabeth, Highland Park, Newark, Orange, Passaic, Paterson, Prospect Park, and Trenton, saving an estimated \$23 million in reduced energy costs over the life of the trees.



Using compact fluorescent light bulbs, Energy Star certified appliances and planting trees in urban environments are just a few of the many ways of implementing energy efficient practices and reducing the impacts of global warming.

Clean Energy Research

In order to determine the feasibility of placing wind turbine facilities off the New Jersey coast, the DEP has initiated research on baseline studies in the waters off New Jersey's coast to determine the current distribution and usage of this area by ecological resources.



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What Does Global Warming Mean for Us in the Garden State?

Rising ambient temperatures are expected to have direct and indirect impacts on human health and the environment in New Jersey. Direct human health impacts are likely to include increased heat stress, especially for vulnerable populations, such as the elderly and poor.

Natural ecosystems, water supply and agriculture are also likely to be affected by warmer temperatures and associated changes in the water cycle. Warmer temperatures are expected to lead to more intense rain events and increase the likelihood of droughts and related habitat changes.

Sea level rise is a major concern to New Jersey. New Jersey is especially vulnerable due to the topography of its coastline, current coastal erosion, and its high density coastal development. A significant sea level rise would threaten the majority of the state's coastline and would be magnified during storms.

Visit New Jersey's Global Warming Web Site

The Governor's office has signaled the importance of reducing greenhouse gas emissions by establishing a state web site (www.nj.gov/globalwarming) and linking it to both the state's and the Governor's home pages. Please visit the site to learn more about what you and your family can do to combat global warming. Even the simplest actions like switching from traditional light bulbs to compact fluorescent bulbs can make a difference.